

Dr.Sandip Tukaram Shingade

Assistant Professor

Dept. of Computer Engineering & IT, VJTI, Mumbai, India

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Research Interest

Parallel computing, Optimization Techniques, and Artificial Intelligence

Courses Taught

Parallel Computing, Optimization Techniques, Discrete Mathematics and Application, Automata Theory, , Multi Core Technology, Parallel and Distributed Algorithm, Data Mining, Database management System, Distributed Database Management system, Software Project Management, Data Structures and Algorithms, Development Engineering and Computer Organization and Architecture

Educational Qualification

- ***Ph.D. (Computer Science and Engineering)***
Indian Institute of Technology Roorkee (IIT Roorkee), Roorkee, Uttarakand, India
- ***M. Tech. (Computer Engineering)***
Veermata Jijabai Technological University (VJTI), Matunga, Mumbai, Maharashtra, India
- ***B.E. (Computer Engineering)***
Vishwakaram Institute of Technology (VIT), Pune, Maharashtra, India

Experience

Academic

- 15 Year Working as an Assistant Professor, Department of Computer Engineering and Information Technology, Veermata Jijabai Technological Institute (VJTI), Mumbai, India, since 3rd January 2011.

Administrative

Current Department Level

- Ph.D. Coordinator, CE & IT department .
- DAC Member, CE & IT department .
- Member as Mentor Mentee cell.
- Coordinator, Internship Process .
- Coordinator, PhD colloquium
- Member, Departmental Board of Studies (BoS) from December 2010 to till date

Department Level

- In charge, Laboratory-3 from October 2011-2016.
- Coordinator, Industry-Institute-Interaction (III) for AY 2023-24.
- Member, Organization committee Digital Campus Hackathon from 13th to 14th January in AY 2022-23
- Member, Department scrap committee from AY 2022-23
- Coordinator, Ph.D. Admission Process 2021, 2022, 2023.
- Member, Department Academic and administration audit from AY 2022-2023.
- Member, Department Academic Committee from July 2020 to July 2022.
- Member, Department non-teaching Faculty Promotion Committee member 2022 to 2024
- Coordinator, B. Tech. Information Technology NBA Team from January 2020 to December 2021.
- Member of criteria co-coordinator , CE & IT Department.
- Coordinator, Faculty Recruitment (B Tech CE & IT Department) from January 2019 to March 2025.

- Coordinator, Summer Term for Year 2014
- Coordinator, Time Table from January 2011 to June 2016.

Current Institute Level

- Faculty Advisor, Digital VJTI (Digital VJTI-Cell) VJTI for AY 2022-till.
- Member, BC cell committee AY 2015 to Till.
- Member, Institute Innovation Council(IIC) Social media Member
- Member, Institute's Services to the community Committee.
- Member, Institute Training & Placement Internship Committee.
- Member, Institute Innovation Council(IIC) Social media Member

Institute Level

- Member, faculty Interview observer
- Member, MTech Institute Level Spot round admission member
- Member, VJTI convocation committee
- Coordinator, Registration In charge (VJTI) - AY 2011 to 2015.

Outside Institute

- Reviewer for the Journal & Conference
- Venue Officer MAH-MBA/MMS-CET-2024, 2025
- Verification officer for RO Mumbai office
- Regional Meet: Institute Innovation council Participation
- Syllabus reviewer and External paper setter for various Institute
- Expert lecture given for various institutes
- Project, Lab & Oral Examinar for various institutes
- Contributing to Conduct Workshop 18th Aavishkar 2024

Memberships

- Indian Society for Technical Education (*ISTE*), *Life Member*

Thesis Supervised

- Ph.D. 00 completed 03 in progress
- M. Tech. 28 completed 05 in progress
- B. Tech. 23 completed 03 in progress

Publication

%Journals

- 1 Dev Bhuvra · Manav Shah · Manav Abhang · Akash Kumar, **Sandip Shingade**, Sushila Shelke, "Graph-NeXt: a unified CNN-GNN framework for deepfake video detection," *Multimedia Tools and Applications*, vol. 85, no. 5, p. 483, 2026. **Springer**.
- 2 Utsav Khatu · Pranit Rohokale · Sahil Kedare · Aryan Devikar · **Sandip Shingade** · Sushila Shingade, "Single block over network (SBON): a paradigm for efficient fine-tuning of neural networks in medical imaging," *Multimedia Tools and Applications*, vol. 85, no. 2, p. 106, 2026. **Springer**.
- 3 Bhavik Bharambe · Nishant Patil · Naman Kothari · **Sandip Shingade** · Sushila Shingade, "Efficient Supply Chains in Agriculture Through Cluster-Based Route Optimization," *Operations Research Forum*, vol. 7, no. 1, p. 13, 2026. **Springer**.
- 4 Varsha H. Bodade · Sushila Shelke · Neeta Maitre · Satish Samptaro Salunkhe, **Sandip Shingade**, "Energy-efficient graph learning with blockchain-IoT integration for secure smart city energy management," *Electrical Engineering*, vol. 108, no. 2, p. 104, 2026. **Springer**.

- 5 Varsha Bodade · Sushila Shelke · Neeta Maitre · Satish Samptarao Salunkhe · **Sandip Shingade**, “Spatiotemporal Blockchain Networks for AI-driven IoT-Enabled Multi-Layer Urban Energy Optimization in Smart Cities,” *Journal of Circuits, Systems and Computers*, p. 2650041, 2025. **World Scientific**.
- 6 Sampada Deshpande, Kalyani Shirsath, Amey Pashte, Pratham Loya, **Sandip Shingade**, Vijay Sambhe, “A Comprehensive Survey of Advancement in Lip Reading Models: Techniques and Future Directions,” *IET Image Processing*, 2025. **WILEY**.
- 7 **Sandip T. Shingade**, Rajdeep Niyogi and Sushila Shelke , “Improved employee bee algorithm for team formation,” *Evolving Systems*, 2025. **Springer**.
- 8 **Sandip T. Shingade**, Rajdeep Niyogi and Mayuri Pichare, “Hybrid Particle Swarm Optimization-Jaya Algorithm for Team Formation,” *Algorithms*, 2024. **MDPI**.
- 9 Sushila Shelke, Neeta Maitre, **Sandip T. Shingade**, , “Identification of Rumor Sources in Social Network: Reverse Propagation Approach,” *International Journal of Intelligent Systems and Applications in Engineering (IJISAE)*, 2024. **Elsevier**.

Conferences

- 1 Priya Mali , Parth Shirole, and **Sandip Shingade**, “Integrating Dual Strengths: A Hybrid Architecture Merging Decentralized Trust with Server-Side Efficiency for Enhanced Secure Transactions,” in *International Conference on Computational Science and Its Applications*), 2024, pp. 311–326. **Springer Nature**.
- 2 **Sandip Shingade** and Rajdeep Niyogi. “An Approach for Team Formation Using Modified Grey Wolf Optimizer.,” in *In International Conference on Computational Science and Its Applications*), 2023, pp. 440–452. **Springer Nature**.
- 3 **Sandip Shingade** and Rajdeep Niyogi. “An Approach for Efficient Experts Selection in Team Formation Problems.” in *In International Conference on Advanced Communication and Intelligent Systems*), 2023, pp. 256–270. **Springer Nature**.
- 4 Akshay Vaje, Vaibhav Ranashoor and **Sandip Shingade**, “Multi-class Classification of Leaves Using Transfer Learning,” in *International Conference on Information, Communication and Computing Technology*.), 2022, pp. 137–150. **Springer Nature**
- 5 A Mahajan, D Khandelwal, R Kapuskari, R Chaudhari, and **Sandip Shingade**, “Distributed immutable ledger to maintain integrity and anonymity in health insurance—a blockchain approach,” in *IET*.), 2022, pp. 107–111. **IET**
- 6 A Shah, E Kadam, H Shah, S Shinde, and **Sandip Shingade**, “Deep residual networks with exponential linear unit,” in *international symposium on computer vision and the internet*.), 2016, pp. 59–65. **ACM**
- 7 G Joshi, **Sandip Shingade**, and M R Shirole “Empirical study of virtual disks performance with KVM on DAS,” in *International Conference on Advances in Engineering & Technology Research (ICAETR-2014)*.), 2014, pp. 1–85. **IEEE**
- 8 Rohit Wani , **Sandip Shingade**, and M R Shirole “Virtualized dynamic URL assignment web crawling model,” in *International Conference on Advances in Engineering & Technology Research (ICAETR-2014)*.), 2014, pp. 1–75. **IEEE**

Invited Talks

- 1 Delivered an expert session as a Speaker on ‘‘Parallel Algorithms from a Research Perspective in High-Performance Computing’’ on 07th May 2026, organized by the Usha Mittal Institute of Technology, SNDT Women’s University under the aegis of the PMUSHA (MERU) Project on High-Performance Computing.
- 2 Delivered a Session Speaker on ‘ Parallel Algorithms in High Performance Computing ’’, 03th March 2026, organized by our institute under the aegis of the National Supercomputing Mission, in association

with Walchand College of Engineering (NSM Nodal Centre), and Centre for Development of Advanced Computing, Mumbai

3 Delivered a Expert Talk on '*Computability Theory of Turning Machine* ', 21th April 2025, at Department of Computer Engineering, MKSSS's Cummins College of Engineering for Women, Pune, Maharashtra.

4 Delivered a Expert Talk on '*Advanced Techniques in Association Rule Mining* ', 30th November 2024, at Department of Computer Engineering, MKSSS's Cummins College of Engineering for Women, Pune, Maharashtra.

5 Delivered a Expert Talk on '*Function , Recurrence relation and application in discrete structure* ', 06th November 2024, at Department of Computer Engineering, Sardar Patel Institute of Technology(SPIT), Mumbai, Maharashtra.

Professional Activities

Board of Study member (BOS)

- Board of Studies Member, Department of Information Technology, SGGS Institute of Engineering and Technology., Nanded , Maharashtra, India.

Session Chair

- International Conference on Interdisciplinary Advances in Mechanical, Electronics, and Computer Engineering (INMEC 2026)(2026), organized by Keystone School of Engineering, Pune, Maharashtra, India. International Conference on Next Generation Computing (ICNGC-2K25)(2025), organized by Department of Computer Engineering, Dr. D. Y. Patil Institute of Technology, Pimpri, Pune, Maharashtra, India

Reviewer Journal

- Multimedia Tools and Applications, Springer. Journal of Systems Science and Systems Engineering, Springer. Discover Computing, Springer. Applied AI Letters, Wiley.

Reviewer Conference

- International Conference on Future Technologies(ICFT) 2025, International Conference on Computational Complexity and Intelligent Algorithms (IC3IA)(2025), International Conference on Intelligent Systems, Advanced Computing, and Communication(ISACC) (2025), International Conference on Emerging Trends in Networks and Computer Communications (ETNCC) (2025), 5th International Conference on Advances in Information Communication Technology & Computing(2024), International Conference On Electrical Electronics Communication and Computers, (2023).

Organization of Faculty Development or Training Activities Programme

- 1 Member of organizing committee on 1-Day workshop on '*Innovation and Entrepreneurship workshop* ', during 3th January 2025, at Veermata Jijabai Technological Institute (VJTI), Mumbai.
- 2 Member of organizing committee on 1-Day workshop on '*Teaching Pedologies, Research and Social Connect* ', during 10th May 2024, at Veermata Jijabai Technological Institute (VJTI), Mumbai.
- 3 Coordinated 1-Week workshop on '*Quality Assurance through NAAC Accreditation Process* ', during 21st February to 25th February 2023, at Veermata Jijabai Technological Institute (VJTI), Mumbai.
- 4 Member of organizing committee on '*Hackathon* ', during 13th January to 14th January 2023, at Veermata Jijabai Technological Institute (VJTI), Mumbai.
- 5 Member of organizing committee for 1-Day TEQIP-II workshop on '*Skill India* ', 25th February 2016, at Veermata Jijabai Technological Institute (VJTI), Mumbai.

- 6 Member of organizing committee for 1-Day TEQIP-II workshop on ‘*Digital Transformation*’, 2nd February 2016, at Veermata Jijabai Technological Institute (VJTI), Mumbai.
- 7 Member of organizing committee for 2-Days TEQIP-II workshop on ‘*Internet of Things (IoT)*’, during 23rd January to 24th January 2016, at Veermata Jijabai Technological Institute (VJTI), Mumbai.
- 8 Member of organizing committee for 1-Day TEQIP-II workshop on ‘*Internet of Things (IoT)*’, 8th January 2016, at Veermata Jijabai Technological Institute (VJTI), Mumbai.
- 9 Member of organizing committee on ‘*Advance Pedagogy And Managing The Learning Process, Conducted by NITTTR Bhopal,*’, during 30th November to 04th December 2015, at Veermata Jijabai Technological Institute (VJTI), Mumbai.
- 10 Member of organizing committee on ‘*Pedagogy Skill Development Conducted by NITTTR Bhopal,*’, during 15th December to 19th December 2014, at Veermata Jijabai Technological Institute (VJTI), Mumbai.